

WHAT WE CLAIM IS:

1 1. A luminaire having a mock light source for improved source brightness control
2 comprising
3 a housing having a downlight opening,
4 an active light source operatively held in said housing above said downlight opening, said
5 light source having a bottom surface portion which faces the downlight opening of said housing
6 and which ordinarily would be exposed therethrough, and
7 a brightness reduction cover element operatively positioned in said housing below and in
8 proximity to the bottom surface portion of said light source, said brightness reduction cover
9 element being sized and shaped to surround the bottom surface portion of said light source to
10 substantially the minimum extent necessary to prevent exposure of the active light source
11 through the downlight opening of said housing, said brightness reduction cover element being
12 exposed through said downlight opening for providing an observable mock light source at the
13 approximate position of said active light source wherein said mock light source has a reduced
14 brightness surface to simulate a relatively low brightness light source within said housing.

1 2. The luminaire of claim 1 wherein the brightness reduction cover element is fabricated
2 of light diffusing material.

1 3. The luminaire of claim 1 wherein said brightness reduction element has an arcuate
2 shape to simulate a tubular-shaped light source when observed through said downlight opening.

1 4. The luminaire of claim 1 wherein said brightness reduction element has an square
2 shape to simulate a square-shaped light source when observed through said downlight opening.

1 5. The luminaire of claim 1 wherein said light source includes two side-by-side
2 fluorescent tubes each of which has a bottom surface portion that faces the downlight opening in
3 said housing, and wherein said brightness reduction element has two side-by-side arcuate
4 portions, each of which is positioned below one of said side-by-side fluorescent tubes for
intercepting light emitted therefrom.

6. The luminaire of claim 5 wherein the arcuate portions of said brightness reduction
element have upwardly extending interior edges and wherein said arcuate portions are joined
together at said interior top edges to form a unitary structure.

7. The luminaire of claim 6 wherein the joined interior edges of the arcuate portions of
said brightness reduction element are substantially opaque to achieve visual separation of the
arcuate portions at the joined edges.

1 8. The luminaire of claim 1 wherein said light source includes at least one high output T5
2 fluorescent lamp and said brightness reduction cover element is sized, shaped and has brightness
3 characteristics that simulate a standard T12 fluorescent lamp when observed through said
4 downlight opening.

1 9. The luminaire of claim 1 wherein said light source includes at least one high output T5
2 fluorescent lamp and said brightness reduction cover element is sized, shaped and has brightness
3 characteristics that simulate a standard T8 fluorescent lamp when observed through said
4 downlight opening.

1 10. The luminaire of claim 1 wherein said housing has a top opening for indirect lighting
2 and wherein said active light source has an uncovered top surface facing said top opening, said
3 top surface providing an unobserved relatively high brightness source of indirect lighting while
4 the brightness reduction cover element provides an observed mock source of direct lighting
5 having relatively low brightness.

1 11. The luminaire of claim 10 wherein said brightness reduction cover element is a light
2 diffuser cover element.

1 12. The luminaire of claim 1 wherein said brightness reduction cover element is
2 comprised of a perforated metal sheet material to produce an average brightness that is lower
3 than the brightness of said active light source.

1 13. The luminaire of claim 12 wherein said perforated metal sheet material has a thin
2 diffuser liner to reduce high spot brightness on said sheet material.

1 14. A luminaire having a mock linear light source for improved source brightness control
2 comprising
3 an elongated housing having an elongated downlight opening,
4 an active tubular light source operatively held in said housing above said downlight
5 opening, said light source having a bottom surface portion which faces the downlight opening of
6 said housing and which is ordinarily exposed therethrough, and
7 an elongated light diffuser cover strip operatively positioned in said housing below and in
8 proximity to the bottom surface portion of said active tubular light source, said light diffuser
9 cover strip extending upwardly about the bottom surface portion of said light source at least to,
10 but not substantially beyond a defined cutoff angle which prevents exposure of said light source
11 through the downlight opening of said housing, said diffuser cover strip being exposed through
12 said downlight opening for providing an observable source of reduced brightness at the
13 approximate position of said active tubular light source to simulate a relatively low brightness
14 light source within said housing.

1 15. The luminaire of claim 14 wherein said tubular light source includes at least one
2 fluorescent lamp of a defined diameter and said diffuser cover strip is sized, shaped and has the
3 reduced brightness characteristics of a fluorescent lamp of a larger diameter than said fluorescent
4 lamp.

1 16. The luminaire of claim 15 wherein said light source includes at least one high output
2 T5 fluorescent lamp and said light diffuser cover strip is sized, shaped, and has the reduced

brightness characteristics to simulate a standard T12 fluorescent lamp.

17. The luminaire of claim 15 wherein said light source includes at least one high output T5 fluorescent lamp and said light diffuser cover strip is sized, shaped, and has the reduced brightness characteristics to simulate a standard T8 fluorescent lamp.

18. The luminaire of claim 14 wherein said light diffuser cover strip is fabricated of an opal diffuser material.

19. The luminaire of claim 14 wherein said light diffuser cover strip is removably secured in said housing.

20. The luminaire of claim 14 wherein said diffuser cover strip extends upwardly about the active tubular light source a distance that is no greater than approximately one half the diameter of the light source.

21. An indirect-direct luminaire having an observable mock light source for improved source brightness control comprising
a housing having a bottom downlight opening and top uplight opening,
a light source operatively held in said housing above said downlight opening, said light source having a bottom surface portion which faces the downlight opening of said housing and which is exposed therethrough, and a top surface portion facing said top opening for providing

7 indirect lighting therethrough, and

8 a brightness reduction cover element operatively positioned in said housing below and in
9 proximity to the bottom surface portion of said active light source, said brightness reduction
10 cover element extending upwardly about the bottom surface portion of said light source a
11 sufficient distance to prevent exposure of said light source through the downlight opening of
12 said housing without substantially affecting the indirect lighting produced through the top
13 opening of said housing, said diffuser cover element being exposed through said downlight
14 opening for providing an observable source of reduced brightness at the approximate position of
15 said active light source to simulate a relatively low brightness light source within said housing.

22. The direct-indirect luminaire of claim 21 wherein said brightness reduction cover element is replaceably held in said housing whereby cover elements having different appearance characteristics can be installed to modify the characteristic appearance of the mock light source.

23. The direct-indirect luminaire of claim 21 further comprising a baffle structure in the downlight opening of said housing below said the brightness reduction cover element for shielding said brightness reduction cover element from direct view at high viewing angles.

24. The direct-indirect luminaire of claim 23 wherein said baffle structure includes transverse baffle elements have top edges and wherein said brightness reduction cover element is supported along the top edges of said baffle elements.

25. A luminaire having an active high output fluorescent lamp with high surface brightness comprising

an elongated housing for said high output lamp, said housing having an elongated downlight opening, and

a light diffuser cover strip operatively positioned in said housing below and in proximity to the bottom surface portion of said high output fluorescent lamp and being observable through the downlight opening of said housing, said light diffuser cover strip extending upwardly about the bottom surface portion of said light source in a substantially semi-cylindrical shape and simulating the tubular shape of a fluorescent lamp which is larger than and has a reduced surface brightness as compared to the active high output lamp of said luminaire.

26. The luminaire of claim 25 wherein said brightness reduction cover element is sized, shaped and has brightness characteristics that simulate a standard T8 fluorescent lamp when observed through said downlight opening.

27. The luminaire of claim 26 wherein said light source includes at least one high output T5 fluorescent lamp.

28. The luminaire of claim 25 wherein said brightness reduction cover element is sized, shaped and has brightness characteristics that simulate a standard T12 fluorescent lamp when observed through said downlight opening.

29. The luminaire of claim 28 wherein said light source includes at least one high output T5 fluorescent lamp.

30. A luminaire having a mock linear light source for improved source brightness control comprising

an elongated housing having an elongated downlight opening,

an active light source operatively held in said housing, said light source having a bottom surface portion which is ordinarily exposed through the down light opening of said housing and further having a characteristic surface brightness,

an elongated light diffuser cover strip having a uniform cross-sectional shape that simulates the size and shape of an elongated light source having a larger surface area than said active light source, said elongated cover strip having lengthwise ends of a defined cross-sectional shape, and

cover strip retainer brackets in said housing for replaceably holding the ends of said diffuser cover strip and for positioning said cover strip below and in proximity to the bottom surface portion of said active light source such that said cover strip extends upwardly about the bottom surface portion of said light source, said cover strip being exposed through said downlight opening for providing an observable source of reduced brightness at the approximate position of said active light source to simulate an elongated light source within said housing having relatively low surface brightness as compared to the surface brightness of said active light source.

31. The luminaire of claim 30 wherein each of said cover strip retainer brackets includes

a cover strip retention slot having a shape conforming to the cross-sectional shape of the ends of the cover strip for slidably receiving the ends of the cover strip.

32. The luminaire of claim 31 wherein the cover strip retention slot in at least one of said retainer brackets has sufficient width to allow for thermal expansion of said cover strip.

33. The luminaire of claim 31 wherein said cover strip has a semi-cylindrical shape to simulate a tubular shaped light source, and the retention slot in each said retainer brackets is semi-circular shape conforming to the shape of said cover strip.

34. A method of producing direct and indirect lighting from an active light source having top and bottom surface portions with relatively high surface brightness comprising producing uplight for indirect lighting directly from the top surface portion of said light source, and

producing downlight for direct lighting through a brightness reduction cover element positioned below and in close proximity to the bottom surface portion of said light source, said brightness reduction cover element being sized and shaped to surround the bottom surface portion of said light source so as to simulate a relatively low brightness light source having a larger surface area than the surface area of said active high output light source.

35. The method of claim 34 wherein said light reduction cover element has a substantially semi-cylindrical shape and simulates a fluorescent lamp of a desired size having a

surface brightness which is lower than the surface brightness of said active light source.

36. The method of claim 35 wherein said active light source is a high output T5 fluorescent lamp and wherein said light reduction cover element simulates a tubular shaped fluorescent lamp having a diameter of between approximately 1 and 1 1/2 inches.

37. The method of claim 35 wherein said active light source is a regular T5 fluorescent lamp and wherein said light reduction cover element simulates a tubular shaped fluorescent lamp having a diameter of between approximately 1 and 1 1/2 inches.

38. The method of claim 34 wherein said active light source includes at least two side-by-side active tubular shaped fluorescent lamps and wherein a brightness reduction cover element having a substantially semi-cylindrical shape is provided for each of said fluorescent lamps to simulate two side-by-side fluorescent lamps of a desired size having a surface brightness which is lower than the surface brightness of said active fluorescent lamps.

39. The method of claim 38 wherein the cover elements for said fluorescent lamps are joined along their interior edges to form a unitary cover element structure which simulate two side-by-side fluorescent lamps.

40. The method of claim 39 wherein the joined interior edges of the arcuate portions of said brightness reduction element are substantially opaque to achieve visual separation of the

arcuate portions at the joined edges.

41. The method of claim 39 wherein said at least two side-by-side active fluorescent lamps are high output T5 lamps and the brightness reduction cover element for each said active high output T5 fluorescent lamp simulates a T8 fluorescent lamp.

42. The method of claim 39 wherein said at least two side-by-side active fluorescent lamps are regular T5 lamps and the brightness reduction cover element for each said active high output T5 fluorescent lamp simulates a T8 fluorescent lamp.

43. The method of claim 39 wherein said at least two side-by-side active fluorescent lamps are high output T5 lamps and the brightness reduction cover element for each said active high output T5 fluorescent lamp simulates a T12 fluorescent lamp.

44. The method of claim 39 wherein said at least two side-by-side active fluorescent lamps are regular T5 lamps and the brightness reduction cover element for each said active T5 fluorescent lamp simulates a T12 fluorescent lamp.